



BSI Standards Publication

**Organic, organo-mineral and inorganic
fertilizers — Detection of *Salmonella* spp.**

National foreword

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The UK participation in its preparation was entrusted to Technical Committee CII/37, Fertilisers and related chemicals.

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**Organic, organo-mineral and inorganic fertilizers -
Detection of *Salmonella* spp.**

Engrais organiques, organo-minéraux et inorganiques -
Recherche des *Salmonella* spp.

Organische, organisch-mineralische und mineralische
Düngemittel - Nachweis von *Salmonella* spp.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (CEN/TS 17780:2022) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

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Introduction

This document describes a method for the detection of *Salmonella* spp. in fertilizers of the following Product Function Categories (PFCs) of EU fertilizing products, as described in the Regulation (EU) 2019/1009 [1]:

- PFC 1(A): Organic fertilizer;
- PFC 1(B): Organo-mineral fertilizer;
- PFC 1(C): Inorganic fertilizer, which contains more than 1 % by mass of organic carbon, other than organic carbon from chelating or complexing agents, nitrification inhibitors, denitrification inhibitors or urease inhibitors, coating agents, urea or calcium cyanamide. The present method was validated on products known as present on the market in April 2021 and conform to Regulation (EU) 2019/1009 [1] that are inorganic fertilizers with more than 1 % of organic carbon such as struvite with low level of organic matter. In case that other products would be developed having other physical and chemical characteristics, it might become necessary to develop different methods to correctly account for pathogenic microorganisms they might contain.

1 Scope

This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [1]. However, the present method was not validated for blends.

This document specifies a method for the detection of *Salmonella* spp. in organic, organo-mineral and inorganic fertilizers. The method is based on EN ISO 6579-1 and its validated alternative methods for the detection of *Salmonella* spp. in food and feeding stuff.

It requires three successive steps: A selective enrichment, an isolation on a chromogenic agar and finally a confirmation with a serological test (and if required, a selective media).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1

***Salmonella* spp.**

microorganism which forms typical colonies on solid selective media described and which displays the morphological, physiological and biochemical characteristics described when the analysis is carried out in accordance with this document

3.2

detection of *Salmonella*

determination of the detection or not detection of *Salmonella* spp. (3.1), in 25 g or 25 ml of product, when tests are carried out in accordance with this document

3.3

laboratory sample

sample intended for laboratory inspection or testing

3.4

test sample

sample prepared from the laboratory sample (3.3) and from which test portions (3.5) will be taken

3.5

test portion

quantity of material taken from the test sample (or if both are the same, from the laboratory sample) and on which the test is carried out